



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/647,698	08/25/2003	Tommy E. White	GP-302475	2469

7590 10/29/2004

KATHRYN A. MARRA
General Motors Corporation
Mail Code 482-C23-B21
P.O. Box 300
Detroit, MI 48265-3000

EXAMINER

GUTMAN, HILARY L

ART UNIT	PAPER NUMBER
----------	--------------

3612

DATE MAILED: 10/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/647,698

Applicant(s)

WHITE ET AL.

Examiner

Hilary Gutman

Art Unit

3612

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 September 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) 17-20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 and 21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 August 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 8/25/03.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Claims 17-20 are hereby withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 9/30/04.
2. Applicant's election with traverse of invention I in the reply filed on 9/30/04 is acknowledged. The traversal is on the ground(s) that the product as claimed requires a fluid pressure forming process. This is not found persuasive because the patentability of a product does not depend on its method of production (See MPEP 2113).

The requirement is still deemed proper and is therefore made FINAL.

Drawings

3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the vehicle hardware of claim 11 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must

Art Unit: 3612

be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 4-7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 4 recites the following limitations: "an impact load" in lines 3-4 and "a vehicle impact" in line 4. There is insufficient antecedent basis for these limitations in the claim.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1 and 8-11 are rejected under 35 U.S.C. 102(b) as being anticipated by Pedersen.

Art Unit: 3612

Pedersen (5,997,058) discloses a vehicle comprising: a frame (Figures 1 and 8) including at least one structural frame member; and a metal bumper 1 mounted with respect to the at least one structural frame member for receiving a load in the event of an impact to a portion of the vehicle periphery; wherein at least a portion of the bumper is characterized by a curvature.

With regard to claim 8, the bumper includes an inner panel (Figures 4-6) and an outer panel operatively connected to the inner panel such that the inner panel and the outer panel define a cavity therebetween.

With regard to claim 9, the inner panel is characterized by strengthening formations such as 4c (Figure 6).

With regard to claim 10, the inner panel or the outer panel can be formed using a sheet hydroforming process.

With regard to claim 11, the bumper includes an integral tab defining a hole (Figure 3) for the attachment of vehicle hardware such as the frame.

With regards to claims 1 and 10, the recitations that the curvature is the result of exposure to fluid pressure and that the inner and outer panel are formed by specific processes are process limitations. It should be noted that the patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process (MPEP 2113).

8. Claims 12-16 are rejected under 35 U.S.C. 102(b) as being anticipated by McKeon et al.

McKeon et al. (6,349,521) disclose a vehicle bumper comprising: a metal vehicle bumper surface 111 characterized by a curvature formed using fluid pressure.

With regard to claim 13, an inner panel 112 and an outer panel 111 operatively connected to the inner panel, the outer panel defining the surface.

With regard to claim 14, the bumper includes an upper bumper bar portion UPR, a lower bumper bar portion LWR, and a portion CTR interconnecting the upper bumper bar portion and the lower bumper bar portion.

With regard to claim 15, the inner panel is characterized by strengthening formations such as at 120.

With regard to claim 16, the bumper is “adapted to” mount a pair of upper rails and a pair of lower rails. Specifically, the bumper is capable of mounting a pair of upper and lower rails.

9. Claims 1 and 4-5 are rejected under 35 U.S.C. 102(b) as being anticipated by Tohda et al.

Tohda et al. (6,447,049) disclose a vehicle comprising: a frame including at least one structural frame member 18; and a metal bumper 20, 25 mounted with respect to the at least one structural frame member for receiving a load in the event of an impact to a portion of the vehicle periphery; wherein at least a portion of the bumper is characterized by a curvature.

With regard to claim 4, the at least one structural frame member (Figure 2) includes two lower rails 26 and two upper rails 19, and wherein the bumper is operatively connected to the two lower rails and the two upper rails such that an impact load received by the bumper in the event of a vehicle impact is at least partially distributed to the two lower rails and the two upper rails.

Art Unit: 3612

With regard to claim 5, the bumper includes an inner panel 22, 28 (Figure 3) and an outer panel operatively connected to the inner panel.

With regard to claim 1 and the limitation that the curvature is the result of exposure to fluid pressure, it should be known that the patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process (MPEP 2113).

10. Claims 1-3 are rejected under 35 U.S.C. 102(b) as being anticipated by Gotanda et al.

Gotanda et al. (6,712,411) disclose a vehicle comprising: a frame 50 including at least one structural frame member; and a metal bumper 30 mounted with respect to the at least one structural frame member for receiving a load in the event of an impact to a portion of the vehicle periphery; wherein at least a portion of the bumper is characterized by a curvature.

With regard to claim 2, a body panel 20 forms a first portion of the vehicle exterior surface; wherein the bumper 30 forms a second portion of the vehicle exterior surface; wherein the bumper forms a second portion of the vehicle exterior surface; and wherein the first portion and the second portion are substantially contiguous.

With regard to claim 3, a fascia 20 forms a portion of the exterior surface of the vehicle and wherein the portion of the exterior surface of the vehicle has a shape substantially identical to the curvature.

With regard to claim 1 and the limitation that the curvature is the result of exposure to fluid pressure, it should be known that the patentability of a product does not depend on its

Art Unit: 3612

method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process (MPEP 2113).

11. Claims 1 and 4-7 are rejected under 35 U.S.C. 102(b) as being anticipated by Eipper et al.

Eipper et al. (6,224,120) disclose a vehicle comprising: a frame including at least one structural frame member; and a metal bumper mounted with respect to the at least one structural frame member for receiving a load in the event of an impact to a portion of the vehicle periphery; wherein at least a portion of the bumper is characterized by a curvature.

With regard to claim 4, the at least one structural frame member includes two lower rails and two upper rails, and wherein the bumper is operatively connected to the two lower rails and the two upper rails such that an impact load received by the bumper in the event of a vehicle impact is at least partially distributed to the two lower rails and the two upper rails.

With regard to claim 5, the bumper inherently includes an inner panel and an outer panel operatively connected to the inner panel such as is the case with a U-shaped profiles (disclosed, but not apparently shown).

With regard to claim 6, the bumper includes an upper bumper bar portion, a lower bumper bar portion, and portion (Figure 5) interconnecting the upper bumper bar portion and the lower bumper bar portion.

With regard to claim 7, the inner and outer panel each at least partially define the upper bumper bar portion, the lower bumper bar portion, and the portion interconnecting the upper bumper bar portion and the lower bumper bar portion.

Claim Rejections - 35 USC § 103

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

14. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Eipper et al. in view of Sundgren et al.

Eipper et al. (6,224,120) disclose a vehicle comprising: two upper rails 38, 40 and two lower rails 39, 41; and a metal bumper 12 mounted with respect to the two upper rails and the two lower rails for receiving a load in the event of an impact to the periphery of the vehicle, the bumper inherently having an outer panel and an inner panel operatively connected to the outer panel (as is known from U-shaped profiles); wherein the inner panel and the outer panel are characterized by a curvature.

With regard to claim 21 and the limitation that the curvature is the result of exposure to fluid pressure, it should be known that the patentability of a product does not depend on its

Art Unit: 3612

method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process (MPEP 2113).

Eipper et al. lack the inner panel being at least partially corrugated.

Sundgren et al. (6,726,258) teach corrugations 6 on an inner panel of a bumper.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have provided corrugations as taught by Sundgren et al. upon the inner panel of Eipper et al. in order to allow the bumper to spread as well as absorb the energy of a collision object.

Conclusion

15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hilary Gutman whose telephone number is 703-305-0496.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Dayoan can be reached on 703-308-3102. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 3612

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

17. **Any response to this action should be mailed to:**

Assistant Commissioner for Patents

Washington, D.C. 20231

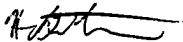
or faxed to:

(703) 872-9326, (for formal communications intended for entry)

or:

(703) 746-3515, (for informal or draft communications, please clearly label

“PROPOSED” or “DRAFT”).



Hilary Gutman
October 25, 2004